

204 - 2
237

Proceedings of the Indian Academy of Sciences

Vol. 89, January-December 1980

CONTENTS (Earth and Planetary Sciences)

QE
1
P733

- Some aspects of geochemistry of pyrophyllite and diaspore deposits of Bundelkhand complex
Rajendra P Sharma 1
- A study of the serpentinitisation in the Vempalle dolomitic limestones near Pulivendala, Cuddapah District
A N Vyasa Rao and M S Murty 17
- Age of Saurashtra miliolites by U-Th decay series methods : possible implications to their origin
N Hussain, N Bhandari, K R Ramanathan and B L K Somayajulu 23
- A gradient method for interpreting magnetic anomalies due to horizontal circular cylinders, infinite dykes and vertical steps
I V Radhakrishna Murthy, C Visweswara Rao and G Gopala Krishna 31
- Finite element modelling for evaluation of apparent resistivity over complex structures
V K Gaur, G C Nayak and P K Gupta 43
- Palaeoclimate, stratigraphy and prehistory in north and west Rajasthan
D P Agrawal, P S Datta, Zahid Hussain, R V Krishnamurthy, V N Misra, S N Rajaguru and P K Thomas 51
- An application of complex demodulation technique to geomagnetic data and conductivity anomaly studies
A K Agarwal, B P Singh and N Nityananda 67
- Role of barotropic, baroclinic and combined barotropic-baroclinic instability for the growth of monsoon depressions and mid-tropospheric cyclones
B N Goswami, R N Keshavamurty and V Satyan 79
- Drift loss cone instability in the ring current and plasma sheet
K G Bhatia and G S Lakhina 99
- Experimental evidence of gravity waves at 80-90 km altitude from OH night airglow observations
Neeta H Majmudar and P V Kulkarni 109

Redefinition of the international spheroid 1930	<i>V K Gaur</i>	115
Pillow structures in serpentinite, Tagadur, Nuggehalli schist belt, Karnataka	<i>K S Sudhakar</i>	117
Cosmic ray effects in the solar system objects	<i>N Bhandari and M N Rao</i>	121
Cosmogenic and bomb-produced ^7Be in stratospheric air	<i>Prem Sagar and P S Goel</i>	133
On the growth and decay of irregularities in the ionosphere	<i>Hari Om Vats and M R Deshpande</i>	137
Measurement of recharge rates in soils through detection of tritium produced in Chinese thermonuclear tests	<i>R N Athavale and C S Murti</i>	145
On the effect of the partial solar eclipse of 29 April 1976 on electron content	<i>G Sethia, H Chandra and M R Deshpande</i>	153
Numerical simulation of the Indian monsoon	<i>P K Das</i>	159
Some aspects of the large scale fluctuations of summer monsoon rainfall over India in relation to fluctuations in the planetary and regional scale circulation parameters	<i>D R Sikka</i>	179
Aircraft measurements of SST using IR radiometer and temperature corrections due to atmospheric effects	<i>H S S Sinha, S V Kasture, V Satyan, R M Pandya and P A Solanki</i>	197
Shift of quasi-stationary flow features during active and break monsoons	<i>R N Keshavamurthy, V Satyan, S K Dash and H S S Sinha</i>	209
Some thermodynamical and microphysical aspects of monsoon clouds	<i>A Mary Selvam, A S Ramachandra Murty, R Vijayakumar, S K Paul, G K Manohar, R S Reddy, B K Mukherjee and Bh. V Ramana Murthy</i>	215
Capability of Bhaskara SAMIR to distinguish atmospheric water vapour and liquid water contents	<i>P C Pandey, A K Sharma and B S Gohil</i>	231
Electrical resistivity anomalies over hydrocarbon bearing structures	<i>V K Gaur, Sri Niwas and N R Garg</i>	239

Study of microwave response of coal and sandstone samples	
<i>R Singh, Ramesh P Singh and K P Singh</i>	249
Magnetic studies on charnockites of Palni Hills	
<i>K Ramaswamy and N Ramamurthy</i>	261
The possible influence of curvature and rotation on ocean currents	
<i>R Narasimha</i>	267
Erratum	276
Monsoon cyclogenesis and large-scale flow patterns over South Asia	
<i>V Satyan, R N Keshavamurthy, B N Goswami, S K Dash and H S S Sinha</i>	277
An empirical method for the estimation of atmospheric water vapour content from SAMIR data	
<i>P C Pandey, B S Gohil and A K Sharma</i>	293
Holocene climate inferences from the sediments of the Western Indian continental shelf	
<i>R R Nair and N H Hashimi</i>	299
Remote sensing of the 'lost' Sarasvati River	
<i>Yash Pal, Baldev Sahai, R K Sood and D P Agrawal</i>	317
Latitudinal variations of geomagnetic solar and lunar tides in the Indian region	
<i>B R Arora, D R K Rao and N S Sastri</i>	333
A semi-analytical non-self similar technique for shock waves from underground peaceful nuclear explosions	
<i>Satish C Gupta, S K Sikka and M P Ranga Rao</i>	347
Relative performance of augmented seismic network under random arrival-time errors	
<i>S K Arora, T K Basu and C A Krishnan</i>	359
Inversion of microearthquake arrival time data	
<i>Sri Niwas, V K Gaur and G C Katiyar</i>	369
Petrology of the alkaline suite of Elchuru, Prakasam District, Andhra Pradesh	
<i>Mihir K Bose and Satrajit Nag</i>	383
Spodumene pegmatites from Hutti, Raichur District, Karnataka State	
<i>M S Sadashivaiah, T C Devaraju, K Gowd Reddy, B S Machigad, V P Linganagoudar, S K Myageri and T M Kankudti</i>	403
Geoelectrical response of a water bearing sandstone-shale sequence and the estimation of sandstone-shale ratios	
<i>Sri Niwas, A K Awasthi and S Mantri</i>	413
Use of reflex discharge probes for evaluating the dynamics of neutral gas clouds	
<i>N Venkataramani and S K Mattoo</i>	431
Erratum	442

